These words all radically mean "hand," and they are all the same, though disguised by prefixes, postfixes, and phonetic change, see § 3. Compare Api ma = Peel River ma = "hand." As to $marah \ 5$, the commonest Australian form of the word for "hand" is m-r. Major Mitchell observes that when the natives of Regent River gave him matto for 5, they held up the fingers. At the same place $matto \ matto \ is \ 10$, with which compare Tanna $kirilum \ kirilum \ 10$, see § 14, 6.

In conclusion, it seems certain that the Australian and Tasmanian numeral-words are Oceanic. The wider question as to the relationship between the Australian group of dialects and the Oceanic could not with propriety be entered upon here, but may be best entered upon from the solid

foundation thus laid as to the numerals.

ART. II.—Descriptions of New, or Little Known, Polyzoa.

PART X.

By P. H. MacGillivray, M.A., M.R.C.S., F.L.S.

[Read 11th March, 1886.]

Family CATENICELLIDÆ.

Catenicella urnula, n. sp. Pl. I., fig. 2.

ZOCCIA vase-shaped; mouth slightly hollowed below; anterior surface with seven large shallow fenestræ; lateral processes large, erect, sharply pointed, frequently a small avicularium on the front of one or both, a shallow hollow on the superior surface. Posterior surface with a narrow, vertical, thickened band, from which two processes extend on each side to the margin of the cell, leaving shallow depressions.

Port Phillip Heads, Mr. J. B. Wilson.

This species, of which I have only seen one small fragment, probably attains a considerable size. It is allied to C. plagiostoma and intermedia, but is readily distinguished by its straight mouth, the shallowness of the fenestræ, the shape and structure of the avicularian process, and the markings on the back of the zoœcia.

Catenicella venusta, n. sp. Pl. I., fig. 1.

Zoarium small; branches slender, crystalline. Zocecia elongated, very narrow, with usually a sharp, barren process on one side, and a thicker, aviculiferous one on the other; mouth subcircular, a narrow, sublateral vitta extending about two-thirds of the length of the cell; surface in front slightly papillose. Occia elongated upwards, adnate on the cell above, with a vertical thickened-line (showing the closure of a fissure), margin with a thickened rim, inside which is usually a series of white-bordered puncta.

Port Phillip Heads, Mr. J. B. Wilson.

This lovely species is totally distinct from any previously described. The zoœcia are remarkably slender. The avicularian processes are directed upwards and forwards; one is usually sharply pointed and without avicularium, while the other is thicker, and is surmounted by a minute avicularium. The oœcium is very peculiar. It is adnate to the zoœcium above. It has a thickened margin, within which there is usually a row of white-bordered puncta; down the centre is a narrow band, slightly clavate above, marking the site of an original fissure, the lower part of which is still occasionally not quite filled in.

Family Escharidæ.

Mucronella avicularis, n. sp. Pl. I., fig. 3.

Zoarium encrusting. Zocecia irregular, decumbent, immersed, or oblique; mouth with a quadrate denticle or process on the lower lip; surface obscurely granular. Numerous large, broadly spatulate avicularia on large calcareous elevations irregularly scattered over the zoarium. Ocecia subglobular, elevated.

Port Phillip Heads, Mr. J. B. Wilson.

In this peculiar species the zoocia are irregularly arranged, being sometimes nearly horizontal, and at others more vertical, very much as in *Cellepora*. The most

characteristic mark is the great development of the avicularia. These are situated on much elevated, cell-like processes; they are shortly and broadly spatulate; the mandible is peculiar in its structure, the lower half (as seen in situ without decalcification or staining) being differentiated from the rest by a thick, chitinous hoop.

Family Tubuliporidæ.

Stomatopora geminata, n. sp. Pl. II., fig. 3.

Zoarium branched; branches obscurely concentrically rugose; surface with numerous brown, white-bordered puncta. Zoœcia separated by shallow sulci, opening in pairs or triplets; mouths projecting, turned rectangularly forward, and closely united together laterally throughout their length.

Port Phillip Heads, Mr. J. B. Wilson.

At once distinguished from all the other species by the arrangement of the cells in pairs or triplets, with the free oral extremities united laterally, and turned rectangularly forward.

Diastopora cristata, n. sp. Pl. II., fig. 1.

Zoarium either encrusting and with portions raised into bilaminate lobes, or wholly bilaminate, the laminæ parted by a thin calcareous septum, the margin of which is produced beyond the zoœcia to form a crest-like ridge. Zoœcia opening on both sides of the lobes; crowded, free for a considerable extent; immersed portions separated by shallow grooves; surface closely and finely punctate, except the free part, which is smooth or obscurely ringed; mouth circular or oblique. Oœcium a large inflation of the zoarium.

Port Phillip Heads, Mr. J. B. Wilson.

In the figured specimen the zoarium consists of a single layer, closely surrounding a branched mass of the calcareous tubes of a small annelid, from the free-growing edge of which in parts extends the margin of a thin calcareous basal lamina. From various parts of the encrusting layer spring small bilaminate lobes, the laminæ of which are separated by a thin calcareous septum (identical with the basal plate of the encrusting part), the edge of which projects in a crest-like manner beyond the zoecia. In another

specimen the zoarium is almost entirely bilaminate, the lobes being considerably larger, and only a small part encrusting; however, here also the laminæ are in part separated to embrace an annelid tube.

Diastopora capitata, n. sp. Pl. II., fig 2.

Zoarium consisting of bilaminate lobes, rising from an encrusting layer by a narrow, stem-like portion, and expanding above; laminæ separated by a calcareous septum, slightly produced beyond the zocecia. Zocecia slightly free at the extremities, indistinct, minutely punctate.

Port Phillip Heads, Mr. J. B. Wilson.

The only specimen I have seen consists of a cluster of four lobes, rising from an encrusting layer of zocecia. Each lobe is narrowed and thicker below, expanded, thinner, and undulated above, and usually divided into two secondary lobes. The summit of the lobes is flatter than in the last, and cellular from the opening of imperfectly formed cells. The zocecia are not so numerous on the stem-like portion, but increase in number and prominence upwards, until towards the summit they are considerably elongated to assume a corymbose appearance. In the encrusting part a few of the zocecia are closed, the lid having a minute perforation in its centre. In both species the dividing septum is not visible on the sides of the lobes, but only on the summits.

The genus Mesenteripora was proposed by Blainville, and has been adopted by D'Orbigny, Smitt, Busk, and others for those diastoporidan forms having the zoarium formed of two layers of zoœcia, parted by a thin calcareous septum, and opening on both sides. One species (M. meandrina, Serles-Wood) has been found recent in Greenland and on the coast of France, as well as fossil in the orag; and several others have been described from various fossiliferous formations. The two species here described are especially interesting, as being the only other recent forms referable to Mesenteripora, and also as showing that there is no valid distinction between that genus and Diastopora. D. cristata, when enveloping the bundle of annelidan tubes, is a Berenicea; when encrusting a nodule it is a true Diastopora, and when erect and bilaminate a Mesenteripora. D. capitata

38

approaches more to a typical *Mesenteripora*; but still the gradation is so complete through the two species as to show that, the zoecial characters being identical, and the zoarial merging into each other, there can be no real generic difference.

EXPLANATION OF FIGURES.

PLATE I.

Fig. 1. Catenicella venusta. Fig. 1b. Back of same. Fig. 2. Catenicella urnula. Fig. 2a. Back of same.

Fig. 3. Mucronella avicularis.

PLATE II.

Fig. 1. Diastopora cristata, showing one surface of a lobe, with the extension of the calcareous septum. Fig. 1a. Another portion of the same specimen, showing an encrusting part, a bilaminate lobe, and an occium.

Fig. 2. Diastopora capitata, natural size. Fig. 2a. One of

the isolated lobes magnified.

Fig. 3. Stomatopora geminata.

The wrong scale has been placed with Plate II., the figures of which are only magnified about half the extent of those in Plate I.